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A new species of the genus *Anomotarus* Chaudoir from New Guinea

(Insecta, Coleoptera, Carabidae, Lebiinae)*

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Anomotarus unicolor, spec. nov. is described from Papua New Guinea. It is perhaps rather closely related to the vividly patterned *A. ocellatus* Darlington, but is distinguished by the unicolorous surface, slightly metallic elytra, and even smaller size.

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Introduction

Within the very interesting collections made by A. Riedel, Friedberg, on several occasions and in several parts of New Guinea I discovered a single specimen of a peculiar unpatterned species of the lebiine genus *Anomotarus*, s. str. According to shape and structure of pronotum and elytra and to structure of microsculpture of surface it belongs to the group of species related to *A. ocellatus* (*A. ocellatus* Darlington, *A. transversus* Darlington, *A. ornatus* Louwerens, *A. fuscipes* Darlington, and *A. wau* Darlington, see Darlington 1968), but is distinguished from all mentioned species by absence of elytral markings, slightly metallic lustre of elytra and pronotum, and by its extremely small size.

The holotype is donated to the Zoologische Staatssammlung, München, but retained as permanent loan in the collection of author (ZSM-CBM).

Measurements

Measurements were made under a stereo microscope using an ocular micrometer. Length has been measured from tip of labrum to apex of elytra, hence, measurements may slightly differ from those of Darlington (1968).

Anomotarus unicolor, spec. nov.

Figs 1, 2

Types. Holotype: ♀, PNG, Morobe-Pr. Aseki, 1500-1650 m, 14.9.1992, leg. A. Riedel (ZSM-CBM).

Diagnosis. Easily distinguished from all New Guinean species by the unicolourous surface; further distinguished from the species related to *A. stigmula* (Chaudoir) by the wider, not heart-shaped pronotum, depressed elytral intervals, and far less distinct microreticulation; and from the species related to *A. ocellatus* Darlington by smaller size and slightly bronzed metallic colour of elytra and pronotum.

* Results of the entomological explorations of A. Riedel in New Guinea in 1992.

Description

Measurements. Length: 3.85 mm; width: 1.5 mm. Ratios. Width pronotum/head: 1.16; width/length of pronotum: 1.32; width base/apex of pronotum: 1.0; length/width of elytra: 1.41; width elytra/pronotum: 1.57.

Colour. Upper surface and most of lower surface glossy black, though pronotum with slight and elytra with distinct metallic lustre, the latter also with reddish translucent margin. Labrum piceous with lighter margins, median parts of meso- and metathorax, and of abdomen dark piceous, the palpi, antenna, and tibiae and tarsi reddish, femora piceous.

Head. Large and wide, neck short and wide, without any impression between frons and neck. Eyes large, laterally slightly more protruding than orbits, the latter about half as long as eyes, rather convex. Labrum large, anteriorly slightly concave. Mandibles short, evenly rounded, apex blunt. Maxillar palpi elongate, apex slightly truncate. Labial palpi barely widened, not securiform, apex oliquely truncate. Mentum with acute tooth. Antenna rather short and stout, surpassing base of pronotum by c. 1 ½ antennomeres, subapical antennomeres ovalish, c. 1.3 × as long as wide. Antenna pilose from 4th antennomere. Frons with a fine carina immediately near eye that slightly surpasses the middle of eye. Upper surface of head except for labrum with rather superficial, though distinct, isodiametric microreticulation and with very fine and sparse punctures, rather glossy. Labrum with very superficial microreticulation. Anterolateral margin of labrum with some pilosity. Lower surface with extremely short and fine, very sparse pilosity.

Pronotum. Short and wide, wider than in most other species, considerably wider than head, with comparatively wide base, not at all cordiform. Disk fairly convex. Apex moderately excised, apical angles slightly protruded, though rounded off. Lateral border evenly curved, without any sinuosity in front of basal angles. The latter small, slightly dentiform. Lateral parts of base moderately oblique, median part slightly projecting. Apex in middle unbordered, lateral channel rather narrow, lateral margin little explanate, base markedly bordered. Median line fine, not touching base, ending at the very shallow anterior transversal sulcus. Disk regularly convex, without distinct basal grooves, though laterally on either side with a shallow, elongate groove. Posterior lateral seta at basal angle, anterior lateral seta situated in anterior third. Surface with very fine transverse sulci, microreticulation in middle very superficial, becoming more evident laterally, consists of about isodiametric to slightly transverse meshes. Puncturation very fine and sparse. Surface with extremely short and fine, rather sparse, almost invisible pilosity, rather glossy.

Elytra. Rather short and wide, posteriorly moderately widened, widest diameter in apical third. Upper surface comparatively convex, though on disk depressed. Shoulders comparatively wide. projecting, though widely rounded off. Lateral border faintly convex throughout, apex slightly sinuate. Marginal channel rather wide. Striae shallow, finely and irregularly punctulate, intervals depressed, only in basal third faintly convex, impunctate. 3rd interval with two setiferous punctures just in front of middle and behind basal third. Intervals with superficial, rather indistinct, irregularly transverse microreticulation, with extremely short and fine, rather sparse, almost invisible pilosity. Surface glossy. Wings fully developed.

Lower surface. Without microreticulation, glossy, with extremely short and fine, rather sparse, almost invisible pilosity. Metepisternum about 2 × as long as wide. Abdominal sterna with one ambulatory seta on either side, terminal sternum in female near apical margin with two setae on either side.

Legs. Rather stout, surface of femora and tibia fairly sparsely pilose. Claws with 2-3 rather elongate teeth. Vestiture of male protarsus unknown.

Male genitalia. Unknown.

Female genitalia (Fig. 2). Stylomere 1 elongate, basally deeply cleft, stylomere 2 elongate, almost parallel, straight, at apex with several very short hairs. The stylus is rather similar to that of *A. stigmula* (Chaudoir) figured by Habu (1967, fig. 40).

Variation. Unknown.

Distribution. Central eastern Papua New Guinea. Known only from type locality.

Habits. Largely unknown. Probably collected by sieving leaf litter in montane rain forest at median altitude.

Etymology. The name refers to the unpatterned surface of the elytra.

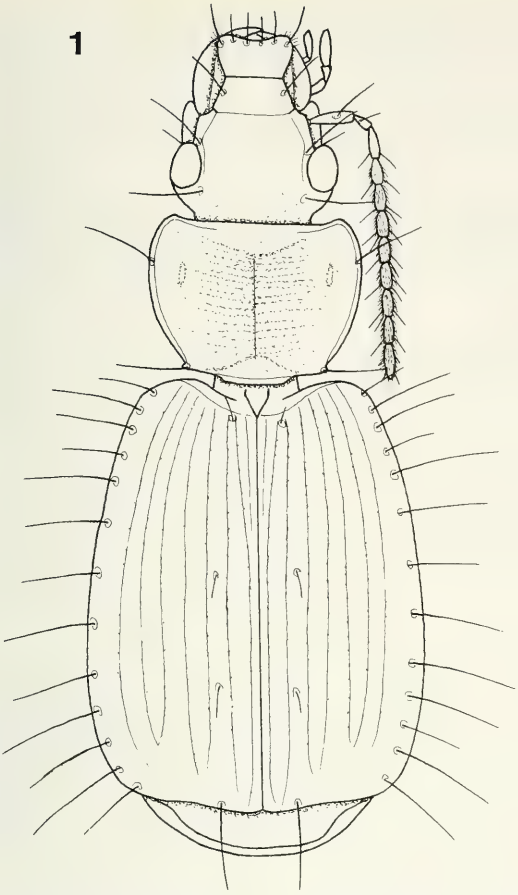

Fig. 1, 2. *Anomotarus unicolor*, spec. nov. 1. Habitus. Length (to apex of abdomen): 4.05 mm. 2. Female stylomeres. Length: 0.3 mm.

Remarks

According to shape of pronotum, structure of elytral striae, and the rather weak microreticulation of the surface, especially the elytra, this species belongs to the group of species related to *A. ocellatus* Darlington that at present includes five rather closely related species. They occurr mainly in New Guinea, though not in Australia, and one of them (*A. ornatus* Louwerens) ranges also to the Moluccas and the Philippine Islands.

Certainly this species group is rather evolved as compared with the group of species related to *A. stigmula* Chaudoir, not only due to the generally bright patterns the known species bear, but also due to the wide, rather convex body shape and the inconspicuous microsculpture of the surface. Perhaps the new species has lost secondarily the distinctive pattern, and this, together with the very weak microreticulation of the surface, the slightly metallic colour of the elytra, and the very small size, would render it one of the most evolved species of the genus. However, this is at present yet uncertain, but will be perhaps clarified in a revision of the Australian species of the genus I am planning for the next future.

Acknowledgements

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